



CERTIFICATE OF ANALYSIS

The Power to Question

Catalog Number: sc-280888
Lot Number: SAMPLE
Product Name: L-Tryptophan
CAS Number: 73-22-3
Molecular Formula: $C_{11}H_{12}N_2O_2$
Molecular Weight: 204.25

Test	Specification	Result
Appearance (Color)	White to light yellow	Light yellow
Appearance (Form)	Powder	Complies
Identification (FTIR)	Consistent with reference spectrum	Complies
Purity (HPLC)	$\geq 98.0\%$	100.0%
pH	5.5 - 7.0	6.3
Residual Solvents	Chloroform: ≤ 60 mg/kg 1,4-dioxane: ≤ 380 mg/kg Dichloromethane: ≤ 600 mg/kg Trichloroethylene: ≤ 80 mg/kg	Chloroform: < 60 mg/kg 1,4-dioxane: < 380 mg/kg Dichloromethane: < 600 mg/kg Trichloroethylene: < 80 mg/kg
Solution (Color)	Colorless to almost colorless	Almost colorless
Solution (Turbidity)	≤ 4.0 NTU	0.3 NTU
Specific Rotation ($\alpha_{20/D}$)	$-32.8 - -29.4^\circ$	-31.3°
Heavy Metals (Pb)	≤ 10 mg/kg	< 10 mg/kg
Chloride	≤ 500 mg/kg	< 500 mg/kg
Iron	≤ 30 mg/kg	2 mg/kg
Sulfate	≤ 300 mg/kg	< 300 mg/kg
Sulfated Ash	$\leq 0.1\%$	0.01%

Satisfaction Guarantee: We appreciate your business and are committed to providing the highest level of quality and service. Any product that does not meet the performance standards indicated in our product literature will be replaced at no charge. Our policy is valid for one year from the date of your purchase.

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